shown by the facts. The rediscount item has increased in spite of these rates. What these high rates were intended to accomplish and what they evidently did accomplish, was to force more careful discrimination between real and unreal and between greater and lesser needs and to cut down the volume of speculation.

Farmers have also been infected by the theory that the so-called deflation policy of the Federal Reserve Banks caused the slump in prices.

PUBLIC SUPPORT OR CLASS CONTROL

No one would be so rash as to claim infallibility for the Federal Reserve Board or for the responsible officers of the Federal Reserve Banks, least of all these persons themselves. It would be strange if they had not made mistakes. They have had to conduct a new institution during a period in which conditions were excessively abnormal and in which principles and rules of action, seemingly well established by experience, were clearly inapplicable. They have had to blaze new trails and to settle new problems upon which very little light was thrown by past experiences here or in other countries. But no fair-minded person can read and digest the testimony of Governors Harding, Strong, Miller and others before the Joint Commission of Agricultural Inquiry and escape the conviction that every policy they adopted was carefully thought out in the light of the actual conditions confronting them, that these policies worked on the whole extremely well and in the best interests of the country, that these men are able and conscientious and know their business and that the country was very fortunate to have the operation of the Federal Reserve System in their hands during this extremely critical period in its history.

The unfortunate thing is that few of the fair-minded people of the country can or will read that testimony. The ordinary man knows little about banking and would find it difficult to understand discussions regarding it if he did read them. Public opinion regarding such matters is not formed by careful reflection and weighing of the facts. Large numbers of people are bound to be influenced and to have their opinions determined by such criticisms as have been made. Since the charter period of the Federal Reserve Banks extends for several more years, the effect of this misguiding of the public mind and feeling is likely to be demands upon Congress for modifications of the Federal Reserve System in the direction of making it subservient to special interests and attempts to put the system in the control of men who will use it in the promotion of such interests. It is time for the friends of sound banking to be on the alert.

The Development of an Open Market for Commercial Paper

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IT is the function of an open discount market to promote mobility, elasticity and maximum economy in the use of credit. Mobility is assured through the free sale and purchase of bills and paper acceptable as a basis of dealing in the market. Where pressure is felt bills are offered for sale and the result-

ing funds relieve the pressure. The funds are offered by those districts where temporary abundance prevails, and where, therefore, a profitable employment of the surplus is sought. Thus, through the instrumentality of the discount market, funds are transferred from places where they are wanted less to places where they are wanted more. This is the essence of credit mobility. Just as an open discount market promotes mobility of credit it also promotes elasticity, namely, expansion and contraction in response to changing demand. An increase in demand is indicated by a growing abundance of paper offered in the market. A decrease in demand is likewise reflected in the liquidation of maturing paper, and in the diminution in the volume of new paper flowing into the market and offered for sale. The more abundant offering of new paper tends to lead to credit expansion, while the liquidation of that which matures, and which is not offset by a corresponding offer of new paper, results in contraction.

An open discount market can be developed irrespective of the system of reserve organization that may characterize a given country. Even under a system of scattered reserves, there is nothing to prevent banks and individuals in different sections of the country from buying and selling discounts from and to one another and from developing whatever market machinery may be necessary for the purpose. Yet since such operations necessarily imply large and rapid movements of funds, it is obvious that under a centralized scheme of reserves, with effective clearing machinery, the inevitable shifting of funds growing out of open market operations can be executed with least friction and delay.

Moreover, under a centralized system of reserves an open discount market contributes toward economy of operation of the credit system because, by promoting the free flow of funds, it permits the full utilization of available credit in the market before further expansion by the central institution becomes necessary. If pressure develops in any area, through the facilities of the open market the surpluses of other areas can immediately be drawn upon without initial resort to the reserve holding agency. With an open discount market the free credit tends to be completely absorbed before the central reserve agency is called upon for the expansion that usually implies a weakening of basic reserves.

Lastly, it may be said that an open market may also be serviceable in the international flow of credit and in the safeguarding of the domestic reserve situation. If the market is sufficiently well established, and if the dealings in it are of a nature and a scope to engender the necessary confidence, the foreigner may be induced to enter in it and to invest in its wares such surplus funds, temporarily available, as he can command. As demand increases and as rates of discount rise, larger and larger sums may be attracted from abroad. This tends favorably to affect the exchange rates and may obviate the necessity of bullion shipments.

Conditions Creating an Open Discount Market

Since an open discount market cannot create itself, it follows that the development of such a market must be contingent upon a favorable conjuncture of circumstances.

First of all, an open discount market requires forms of discountable credit instruments that will lend themselves to a free market handling. Not all credit instruments, of course, are available for open market operations. Un-

der the old national banking system, both law and practice checked the development of satisfactory open market instruments. The typical American credit instrument under that system was the single name promissory note, which, owing to the obviously personal character of the credit which it represented, was not adapted to open market operations. We had a so-called "commercial paper market," but its facilities were at the service only of large and nationally known firms. Moreover, it was a market for the first placement rather than for the free rehandling of paper. It would therefore hardly be regarded as a real discount market.

Similarly, the old commercial time draft which had been a common instrument in pre-Civil War days, degenerated, under the pressure of the cash-discount and the open-account system, into a sort of "dunning" instrument, employed, in all except a few lines, for the purpose of collecting overdue accounts. The bankers' acceptance, on the other hand, which is admirably adapted to free and rapid exchanging, was practically unlawful down to the time when provision was made for it in the Federal Reserve Act and in some state laws. Thus we had no open discount market in this country because we had no paper that could be handled in such a market.

But in addition to a satisfactory commodity to be handled in a market, it is also necessary to have prospective buyers and sellers. In other words, there must be a favorable attitude toward the market and a willingness to use its facilities on the part of those who are expected to resort to it. But in this respect, also, American banking practice had developed along different lines. We had put the emphasis on independent, highly competitive local institutions, each more or less distrustful of the rest and safeguarding its business secrets with a peculiar jealousy. The cash-discount and single-name system also tended to emphasize the direct relations between the banker and his client and was thus inimical to the development of a system which implied the free handling of paper in an open market. In general, except in their relations with their regular metropolitan correspondents, bankers did not wish to confess the need for any assistance. Hence there was a strong tendency for them to hold on to the paper that they had originally discounted. They also often objected to disclosing the rates which they originally charged, and some have accused them also of wishing to "hog" the whole interest and of being unwilling to split it with others through a process of rediscounting or reselling in an open market. However all this may be, the fact remains that our bankers were not particularly well disposed toward open discount market operations.

THE RESERVE SYSTEM PROVIDES AN OPEN MARKET

The framers of the Federal Reserve Act thus had a task on their hands. The advantages of an open discount market were freely enough conceded, but how were they to provide the necessary technical expedients? And how lay the foundation for a favorable attitude toward such a market? In an earlier article, published in THE ANNALS in January, 1916, the writer discussed the provisions of the Federal Reserve Act and the regulations of the Federal Reserve Board bearing on the subject of commercial paper and promulgated up to that time. The great contribution of the Act itself was a system of reserve centralization and control, the basis of a system of domestic clearings and transfers, and the legalization of

bankers' acceptances. These acceptances were at first limited to export and import transactions, but were later made applicable to domestic transactions as well. Similarly, the amount of acceptances for which a member bank might make itself liable was increased from 50 per cent to 100 per cent of its combined capital and surplus. The Board's contribution is to be found in the regulations which it has drawn up in connection with the different forms of commercial paper and in the policies which it has pursued toward encouraging the use of, and the investment in, paper acceptable for open market operations.

At the present time it may be said that Section 13 of the Reserve Act supplies the member banks with their authority to engage in the acceptance business. The acceptances which they create must have a maturity not greater than six months, exclusive of days of grace. They may grow out of transactions involving the exportation or importation of goods or out of those involving domestic shipments, but in the latter case the acceptances must be accompanied by shipping documents conveying or securing title at the time the member bank makes the acceptance, or they must be secured by warehouse receipts or other such documents conveying or securing title covering readily marketable staples. Similarly, under regulations drawn up by the Board, member banks may accept drafts or bills of exchange drawn upon them by banks or bankers abroad where the purpose is to furnish dollar exchange required by the usages of trade. Such acceptances must not, however, have more than three months' sight to run.

The total amount of acceptances for each member bank is restricted to a sum equal to one-half of its paid-up and unimpaired capital and surplus, although under general regulations the Reserve Board may authorize a member bank to accept bills growing out of exports and imports up to the full amount of its capital and surplus. There is, however, the proviso that in no event may the domestic or the dollar exchange acceptances exceed a total of fifty per cent of the member banks' capital stock and surplus. Similarly, there is a general restriction to the effect that no member bank may accept for any one person or firm to an amount greater than 10 per cent of its paid-up and unimpaired capital and surplus unless the member bank is secured either by attached documents or by some other adequate security growing out of the same transaction as the acceptance. All acceptances in these different classes which mature within three months, exclusive of days of grace, and carry the indorsement of at least one member bank, are eligible for discount at Federal Reserve Banks.

But more important still, so far as an open discount market is concerned, are the provisions of Section 14 of the Federal Reserve Act. This section authorizes Federal Reserve Banks, under regulations prescribed by the Board, to purchase and sell in the open market, at home or abroad, from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities made eligible for rediscount, with or without the indorsement of a member bank.[1]

Since nothing like an open discount market had developed in this country, it was foreseen that in trying to build one up and to win the support of the

[1] In this connection attention should be called to the fact that some of the states have also authorized their banking institutions to engage in the acceptance business.

member banks, the leadership of the Reserve Banks would have to be relied upon. This is what gives special significance to the provisions of Section 14. For the same reason much significance attaches also to the regulations of the Board bearing on the eligibility of paper for rediscount at and for open market purchases by the Reserve Banks.

In general, it may be said that paper to be eligible for discount must have grown out of a transaction involving "producing, purchasing, carrying or marketing goods in one or more of the steps" of "production, manufacture or distribution, or for the purpose of carrying or trading in bonds or notes of the United States."[2] On the other hand, it must not be paper whose proceeds are to be used for fixed investments of any kind or for other capital purposes; or paper used for speculative purposes or for lending to others. Various expedients such as statements, shipping documents, warehouse receipts, etc., are relied upon to guarantee the essential nature of the paper and to safeguard its security. For purposes of rediscount Section 13 of the Reserve Act made eligible notes, drafts and bills of exchange of certain types. But open market purchases by the Reserve Banks were limited to bankers' acceptances and bills of exchange of the kinds and maturities made eligible for rediscount by Section 13. The effect of this limitation was to rule the promissory note out of the field of open market purchases, leaving within this field bankers' acceptances, bills of exchange and so-called trade acceptances which are defined as drafts or bills of exchange "drawn by the seller or the purchaser of goods sold, and accepted by such purchaser."[3]

[2] Regulations A, Series of 1920.

[3] Regulation A, Series 1920, Section V.

THE RESERVE SYSTEM ENCOURAGES AN OPEN DISCOUNT MARKET

From the beginning the Reserve Board has done all that it could to further the development of an open discount market. It encouraged the Reserve Banks in their efforts to emphasize the importance of acceptances as investments, not only by their own purchases but also in the favorable rates that were accorded them. The Board has cordially approved the acceptance service that some of the Reserve Banks have provided for their member banks. Similarly, the Board has also dealt generously with acceptances in its regulations and decisions, although it has tried at the same time to maintain the principles laid down in the Reserve Act with respect to the fundamental character of the paper. During and immediately after the War the Board stretched a point with respect to renewal paper, but only in exceptional cases can such paper now be considered eligible.[4]

Favorable rates of discount were recognized from the outset as the strongest practical stimulant to the growth of an acceptance market. In their open market purchases the Reserve Banks, that were primarily concerned, quoted more favorable rates for acceptances than for other commercial paper and granted the same discrimination also for acceptances directly discounted for the member banks. Such preference was considered fully justified by the essential character of the paper. On the other hand, the Reserve Banks allowed the open market rates to control buying rates as largely as possible, shading the rate slightly where a strong indorse-

[4] See *Sixth Annual Report of the Federal Reserve Board* covering operations for the year 1919, page 22. *Ibid.*, page 33.

ment justified it. To induce broader purchases by member banks the Board itself recognizes that a differential rate must be maintained in favor of prime bills indorsed and rediscounted by member banks. Such differential always assures the member bank of some profit should it find it necessary or desirable to rediscount at its Reserve Bank the acceptances that it has purchased.[5]

Special Inducements to Buy Acceptances

As a further inducement to member banks to invest in acceptances, some of the Reserve Banks have maintained special lines of service. The New York Bank, for example, has for several years bought bills in the open market on member bank account. If desired, the Reserve Bank retains the paper, collects it at maturity and credits the member bank's account.[6] The Richmond Reserve Bank also buys acceptances for its member banks and allows the member bank to specify the names of the acceptors whose paper is wanted.[7] The Richmond Bank also has been buying unindorsed bills directly from the acceptors. This encourages the member bank to utilize its acceptance powers, and, at the same time, affords the Reserve Bank the opportunity of keeping well informed concerning the methods employed in the granting of acceptance credits. The Boston Bank has been making persistent efforts to cultivate investment in acceptances for secondary reserve purposes. The Cleveland and Chicago Banks report a steady broadening of the market as a result of successful missionary work with their member banks through their member bank relations department.[8]

In the development of the acceptance market it was recognized that the dealer would of necessity play an important part. It is essential to the success of the acceptance that it be quickly sold after acceptance has been effected. The dealer has been increasingly relied upon to effect a rapid distribution of the paper as it is created. Naturally, unless there is a rapid turnover in the market, the dealer may have to carry large amounts. This requires more capital than most dealers can afford, and hence some of the Reserve Banks have followed the practice of carrying a part of this load. The Banks take the paper for fifteen day periods under a re-purchase agreement, pending distribution.[9] This has made it possible for the dealers to operate continuously on a much larger scale than would otherwise be the case, and it has meant much, therefore, in the upbuilding of the market.

Extent of the Acceptance Market

The principal market into which acceptances flow is, of course, New York. This has thrown a special burden on the New York Reserve Bank, but through allotments to other Reserve Banks this burden has been distributed to some extent.[10] Purchasers of acceptances were at first only the larger banks, but today dealers have as clients in addition to many banks, corporations, firms and private individuals.[11] During the past year heavy purchases on foreign account have also been made.[12] Moreover, in some states

[5] See *Sixth Annual Report of the Federal Reserve Board* covering operations for the year 1919, page 23.

[6] Report of Federal Reserve agent, *Sixth Annual Report of the Federal Reserve Board,* page 319.

[7] *Seventh Annual Report of the Federal Reserve Board,* page 52.

[8] *Seventh Annual Report of the Federal Reserve Board.,* page 52.

[9] *Ibid.,* page 51.

[10] *Ibid.,* page 51.

[11] *Ibid.,* page 50, p. 366.

[12] See Report Federal Reserve agent, New York District—*Seventh Annual Report of the Federal Reserve Board,* p. 382.

by act of legislature bankers' acceptances have been made eligible investments for savings banks and this promises a fruitful source of demand. The main development has naturally come in the larger industrial and commercial centers. The Board states that, as a rule, in the South, Southwest and certain parts of the West, member banks have only partially exercised their acceptance powers, while purchasers of acceptances are almost exclusively banks in the larger centers of these districts.[13] But it is reasonable to suppose that as time goes on the advantage of the acceptance as a liquid, short-time investment will be quite generally recognized and the scope of the market should be more nearly countrywide than it is now.

The general trend of the acceptance may be indicated by a few tables. Table I shows the acceptance liabilities of member banks at each controller's call since November, 1915.

Tables II and IIA show the Reserve

TABLE I. VOLUME OF MEMBER BANK ACCEPTANCES AS PER THE CONTROLLER'S CALL FOR THE SPECIFIED DATES [a]

(In thousands)

November 10, 1915	266
December 31, 1915	32,876
March 7, 1916	42,677
May 1, 1916	62,452
June 30, 1916	73,641
September 12, 1916	81,290
December 27, 1916	107,909
March 5, 1917	108,550
May 1, 1917	118,799
June 20, 1917	157,870
September 11, 1917	138,231
November 20, 1917	153,645
December 31, 1917	217,190
March 4, 1918	230,164
May 10, 1918	250,323
June 29, 1918	231,805
August 31, 1918	243,772
November 1, 1918	332,719
December 31, 1918	305,101
March 4, 1919	269,173
May 12, 1919	224,150
June 30, 1919	272,035
September 12, 1919	323,226
November 17, 1919	359,109
December 31, 1919	407,639
February 28, 1920	424,669
May 4, 1920	438,430
June 30, 1920	431,196
September 8, 1920	414,583
November 15, 1920	406,525
December 29, 1920	375,416
February 21, 1921	345,644
April 28, 1921	304,231
June 30, 1921	250,925

[a] Specially prepared by the Division of Analysis and Research of the Federal Reserve Board.

[13] See Report Federal Reserve agent, New York District—*Seventh Annual Report of the Federal Reserve Board*, p. 382.

TABLE II. FEDERAL RESERVE BANK DISCOUNTS AND PURCHASES OF TRADE AND BANKERS' ACCEPTANCES [b]

(In thousands)

Year	Discounts		Purchases in Open Market	
	Bankers	Trade	Bankers	Trade
1915	....	1,959	64,814	31
1916	....	5,212	369,762	16,333
1917	....	37,771	1,046,765	30,948
1918	19,940	187,373	1,748,503	61,036
1919	71,643	138,420	2,788,619	36,558
1920	187,162	192,157	3,143,737	74,627
1921-9 Mo.	49,810	101,129	996,851	6,687

TABLE IIA. SAME DATA BY MONTHS FOR 1920 AND 1921 TO DATE

1920	Discounts		Purchases in Open Market	
	Bankers	Trade	Bankers	Trade
January	17,226	16,520	299,746	2,706
February	28,611	11,001	296,959	3,349
March	34,534	23,383	298,459	4,901
April	28,172	15,296	240,704	6,890
May	15,254	16,541	270,498	3,739
June	9,431	13,938	261,333	24,419
July	7,069	13,457	209,296	10,168
August	5,490	14,011	247,438	12,270
September	8,103	17,160	255,858	2,131
October	10,354	19,389	280,162	1,670
November	13,275	15,143	230,832	1,008
December	9,643	16,318	252,452	1,376
Year	187,162	192,157	3,143,737	74,627
1921				
January	8,430	20,171	121,135	1,064
February	6,159	13,256	167,362	2,079
March	11,512	11,709	148,698	557
April	7,404	10,860	121,412	2,099
May	6,560	9,768	137,980	622
June	3,790	9,937	64,599	75
July	1,942	8,673	46,623	47
August	1,408	8,781	107,270	33
September	2,605	7,974	81,772	111
9 Months	69,810	101,129	996,851	6,687

[b] Specially prepared by the Division of Analysis and Research of the Federal Reserve Board.

TABLE III. BILLS BOUGHT IN OPEN MARKET[c]

(In Thousands of Dollars)

Federal Reserve Bank	1917	1918	1919	1920	1921 (9 mos.)
Boston	86,481	194,158	360,784	304,445	....
New York	445,307	945,498	1,211,399	1,697,330	....
Philadelphia	70,710	77,686	14,049	41,232	....
Cleveland	51,007	122,800	261,750	294,602	....
Richmond	54,759	70,766	52,977	51,712	....
Atlanta	25,388	45,477	51,661	39,576	....
Chicago	61,142	122,787	292,012	345,021	....
St. Louis	22,788	26,096	87,503	36,020	....
Minneapolis	16,397	13,903	108,714	18,060	....
Kansas City	17,561	14,691	26,086	17,173	....
Dallas	9,743	25,024	12,415	8,348	....
San Francisco	48,018	150,653	345,827	364,845	....
Totals	909,301	1,809,539	2,825,177	3,218,364	....

[c] Yearly returns Seventh Annual Report Federal Reserve Board, *p.* 52.

Bank discounts and purchases of bankers' and trade acceptances for indicated periods.

Table III shows the purchases in the open market by or for the account of each Federal Reserve Bank during the years 1917–1920 included and for the first nine months of the present year.

FUTURE DEVELOPMENT THROUGH BANKERS' ACCEPTANCES

It will be observed that from the spring of 1920 down to the last quarter of 1921 the volume of operations declined. This was due primarily to the great decline in our foreign trade, but the collapse at home also exerted a considerable influence. Another notable circumstance is the specially large drop in trade acceptances as contrasted with bankers' acceptances. The experience with trade acceptances has not been particularly encouraging. In nature, the trade acceptance differs diametrically from the bankers' acceptance and experience seems to prove that it lends itself to serious abuse.[14] Evils have been complained of also in connection with bankers' acceptances, but such evils can be handled through the banks more easily than trade acceptance abuses can be remedied through the more numerous and less amenable private business firms. The future development of the open market is thus likely to rest more and more completely on the bankers' acceptance, and a great impetus would be given to this development if in domestic business a credit procedure based on the bankers' acceptance were more widely employed.

[14] The Federal Reserve agent of District No. 1 in his 1920 report to the Board says: "The development of the use of trade acceptance—at least the domestic trade acceptance—unlike that of the bankers' acceptances, does not appear to have been entirely satisfactory. That they have been misused there is little question, and for the most part the banks in the district do not feel any more favorably disposed, if as much so, to encourage their use than in the past.